

# Work Order ID 85252

**\*85252\***

Page 1

June-05-12 9:11:41 AM

Item ID: D412-742-043

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Replacement Float Skidtube

Stop **\*NS2\***

Start Date: 05/06/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 19/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/06/05 Tooling:

Date:

Run Start **\*NR1\***

QC:

Date: SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3391	I								

100

0.00

**\*100\***

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

If D412-742-043 is a W/O on it's own,  
Photocopy bluefile and create labels per PPP D412-742-043 CHG005

N/A *[Signature]*

**Work Order ID 85252**

June-05-12 9:11:41 AM

**\*85252\***

Page 2

Item ID: D412-742-043

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Float Skidtube

Start Date: 05/06/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 19/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

110

0.00

**\*110\***

HandFinishing

HandFinish

Memo

0.00

Hand Finishing

1-Install tubes together and seal them all the way around using Sikaflex  
241/291. Ensure tube ends line-up with saddle holes for proper alignment. using  
7/16" "T" Pins.

A/RSikaflex-241/-291 11/12/409Expiry date: 13/03

2-Install wearplates as per Dwg D3391. Ensure that plastic washers are against  
wearplate, then topped with the SS washer. Seal all bolts with sikaflex except  
ones with inserts on inside of tube ,hand tighten only bolts with no sikaflex.

A/RSikaflex-241/-291 11/12/409Expiry date: 14/05

3-Remove "T" pins once sikaflex is dry.

4-Coat all exposed hardware with LPS Procyon. Remove any excess off with  
MEK degreaser.

A/RLPS Procyon 11/12/5961x 11/02/05

# Work Order ID 85252

**\*85252\***

Page 3

June-05-12 9:11:41 AM

Item ID: D412-742-043

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Replacement Float Skidtube

Stop **\*NS2\***

Start Date: 05/06/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 19/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120

QC5- Inspect part completeness to step on W/O

0.00

**\*120\***

QC

Memo

0.00

Quality Control

130

Packaging

0.00

**\*130\***

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D412-742-043

Location:

PPP Rev:

140

QC21- Final Inspection - Work Order Release

0.00

**\*140\***

QC

Memo

0.00

Quality Control

PPP 87 027 12/2/23

12/7/31

U120730

# Picklist Print

June-05-12 9:11:46 AM

Page 1

Work Order ID: 85252

**\*85252\***

Parent Item: D412-742-043

**\*D412-742-043\***

Parent Item Name: Replacement Float Skidtube

Start Date: 05/06/2012

Required Date: 19/06/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev A 05.10.13 New Issue KJ/JLM  
 IPP Rev 06.02.13 ECN 773 dwg @ rev.D EC  
 IPP Rev:C 07-05-28 As per Rev F JLM  
 IPP Rev:D 07-12-04 ECN 1072 DD verified by:JLM  
 IPP Rev:E 08-09-08 ecn 08-510 DD verified by:EC IPP Rev:F  
 11.11.01 as per DSI9517 REV.B DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3391-021 <b>*D3391-021*</b> Fwd Tube Assembly		Manufactured	No			110	Each	0.0000	1	1			
									**	B83862 (1x) Y1 12/07/04			
D3391-023 <b>*D3391-023*</b> Mid Tube Assembly		Manufactured	No			110	Each	0.0000	1	1			
									**	B83625 (1x) Y1 12/07/04			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FP		1							
				GA		-1							
D3391-025 <b>*D3391-025*</b> Aft Tube Assembly		Manufactured	No			110	Each	0.0000	1	1			
									**	B86183 (1x) Y1 12/07/04			
AN3C4A <b>*AN3C4A*</b> BOLT		Purchased	No			110	Each	1,362.000	24	24			
									**	Y1 12/07/04			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST350		1362							
				120187		57							
				120521		28							
				120769		38							
				121205		1000							
				121556		239							
										V24			

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/>            Other <input type="checkbox"/> </div> <div>           Engineering Quality <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Offset/Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unauthorized <input type="checkbox"/>											

FAULT CATEGORY												
<b>Landing Gear</b> <input type="checkbox"/> Bending Passes Below Min <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimp at Bending <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Other <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Ripples on Inner Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<b>Hardware</b> <input type="checkbox"/> Breaking <input type="checkbox"/> Missing <input type="checkbox"/> Size/Length <input type="checkbox"/> Spinning <input type="checkbox"/> Threading <input type="checkbox"/> Wrong  <b>Drill Holes</b> <input type="checkbox"/> Misaligned <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Undersized <input type="checkbox"/> Too Many			<b>General</b> <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Documentation/Data <input type="checkbox"/> Finish <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Inspection Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Jigs/Fixtures/Tooling <input type="checkbox"/> Kit Incorrect <input type="checkbox"/> Kit Missing			<input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Off-Set <input type="checkbox"/> Orientation Misread <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Lost <input type="checkbox"/> Part Moved <input type="checkbox"/> Raw Material		<input type="checkbox"/> Set-up <input type="checkbox"/> Supplier <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other _____ _____ _____	

# Picklist Print

June-05-12 9:11:46 AM

Page 2

Work Order ID: 85252

Parent Item: D412-742-043

Parent Item Name: Replacement Float Skidtube

\*85252\*

\*D412-742-043\*

Start Date: 05/06/2012

Required Date: 19/06/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C6A

Purchased

No

110

Each

451.0000

10

10

**\*AN3C6A\***

BOLT

\*\*

41 12/07/04

Location

Loc Qty

Loc Code

FP001

1

111982

1

ST351

450

111982

2

116419

23

116549

2

116704

12

117619

10

117688

1

117872

5

118422

13

119449

21

120423

3

120693

158

121682

200

Y10

AN3C7A

Purchased

No

110

Each

140.0000

4

4

**\*AN3C7A\***

BOLT

\*\*

41 12/07/04

Location

Loc Qty

Loc Code

ST351

140

113149

14

116169

1

117313

10

117619

12

117688

6

119749

1

120731

8

121185

50

121541

38

Y4

June-05-12 9:11:46 AM

Shop Packet Print

Page 2

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">Skid-tube <input type="checkbox"/></td> <td style="width: 25%;">Crosstube <input type="checkbox"/></td> <td style="width: 25%;">Prod. Eng. Coord. <input type="checkbox"/></td> <td style="width: 25%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Supplier <input type="checkbox"/>	<input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Other <input type="checkbox"/>	<input type="checkbox"/>
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Supplier <input type="checkbox"/>	<input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Other <input type="checkbox"/>	<input type="checkbox"/>															

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Offset/Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unauthorized <input type="checkbox"/>									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending Passes Below Min <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimp at Bending <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Other <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Ripples on Inner Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>Hardware</b> <input type="checkbox"/> Breaking <input type="checkbox"/> Missing <input type="checkbox"/> Size/Length <input type="checkbox"/> Spinning <input type="checkbox"/> Threading <input type="checkbox"/> Wrong  <b>Drill Holes</b> <input type="checkbox"/> Misaligned <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Undersized <input type="checkbox"/> Too Many	<b>General</b> <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Documentation/Data <input type="checkbox"/> Finish <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Inspection Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Jigs/Fixtures/Tooling <input type="checkbox"/> Kit Incorrect <input type="checkbox"/> Kit Missing	<input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Off-Set <input type="checkbox"/> Orientation Misread <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Lost <input type="checkbox"/> Part Moved <input type="checkbox"/> Raw Material  <input type="checkbox"/> Set-up <input type="checkbox"/> Supplier <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other
---	--	---	---

# Picklist Print

June-05-12 9:11:46 AM

Page 3

Work Order ID: 85252

**\*85252\***

Parent Item: D412-742-043

**\*D412-742-043\***

Parent Item Name: Replacement Float Skidtube

Start Date: 05/06/2012

Required Date: 19/06/2012

Start Qty: 1.00

Required Qty: 1.00

AN960C10L NAS1149C0332 Purchased No

110 Each 0.0000 38 38

**\*AN960C10I \*** ✓

washer

11 122063 \*\* (x38) 12/07/01

D4095-041 Manufactured No

110 Each 0.0000 1 1

**\*D4095-041\***

Wearplate Assembly

\*\*

B85616 (1x) 12/07/05

D4095-043 Manufactured No

110 Each 1.0000 1 1

**\*D4095-043\***

Wearplate Assembly

\*\*

B85615 (1x) 12/07/01

Location

Loc Qty

Loc Code

FP001

1

81624

1

D4095-045 Manufactured No

110 Each 15.0000 1 1

**\*D4095-045\***

Wearplate Assembly

\*\*

12/07/01

Location

Loc Qty

Loc Code

FP

1

81625

1

FP001

14

77737

1

84081

13

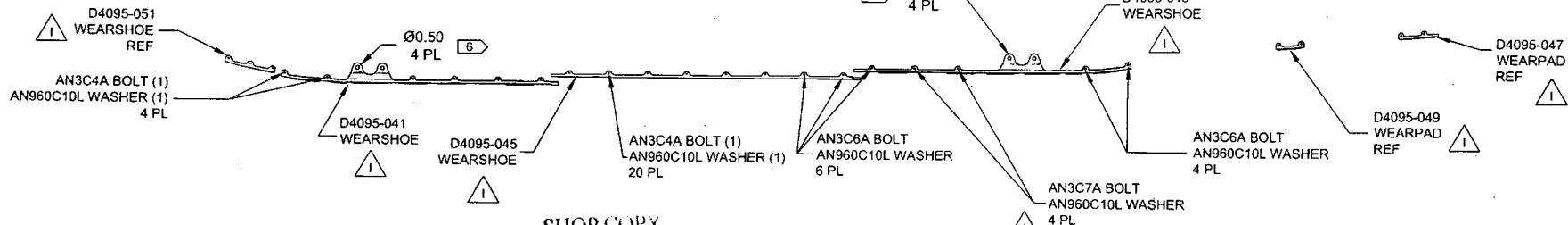
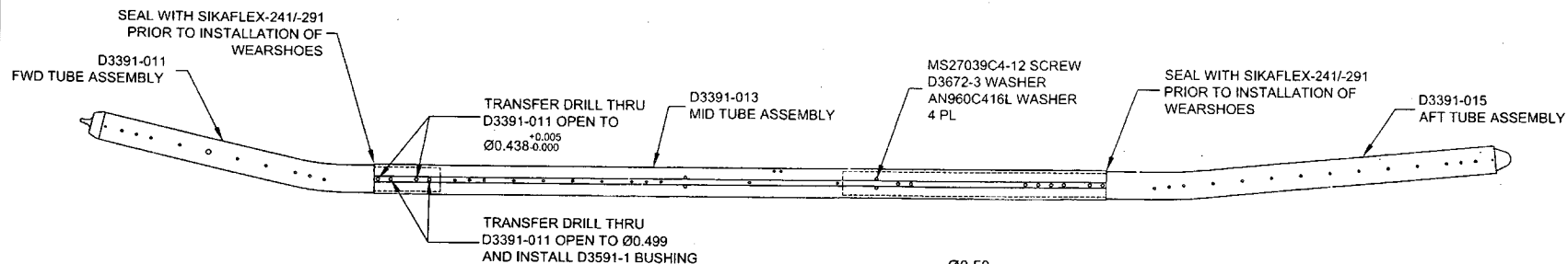
12/07/01

June-05-12 9:11:46 AM

Shop Packet Print

Page 3





SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 85252 MLJ  
12/06/05

D3391-041 ASSEMBLY

RELEASED  
2011-11-04  
ECN# 11-662

# D3391-041 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY	PART NUMBER	DESCRIPTION
X	D3391-041	FLOAT SKIDTUBE ASSEMBLY
1	D3391-011	FWD TUBE ASSEMBLY
1	D3391-013	MID TUBE ASSEMBLY
1	D3391-015	AFT TUBE ASSEMBLY
2	D3591-1	BUSHING
4	D3672-3	WASHER
1	D4095-041	WEARSHOE
1	D4095-043	WEARSHOE
1	D4095-045	WEARSHOE
1	D4095-047	WEARPAD
1	D4095-049	WEARPAD
1	D4095-051	WEARSHOE
24	AN3C4A	BOLT
10	AN3C6A	BOLT
4	AN3C7A	BOLT
38	AN960C10L	WASHER
4	MS27039C4-12	SCREW
4	AN960C416L	WASHER

## GENERAL NOTES

- FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON"  
AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL  $\varnothing 0.297$  SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.
- FIT D4095-041 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL  $\varnothing 0.50$  HOLES FROM SADDLE TO D4095-041
- FIT D4095-043 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH THE APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL  $\varnothing 0.50$  HOLES FROM SADDLE TO D4095-043

I	REMOVE GASKETS AND REPLACE ALL WEARSHOES; PARTS LIST UPDATE, ZN A8-1, ZN A8-2, ZN A6-4, ZN B6-8; LPS-3 COATING REMOVED FROM NOTE 2, ZN A3-1, ZN A3-2, REMOVED INSERT AELS-1032-130, ZN B6-4, B2-4, C7-8, C3-8; REMOVED HOLES, ZN D6-4 ZN D2-4, ZN D7-8, ZN D3-8	XDF	11.10.13
H	DRAWING UPDATED TO CURRENT STANDARDS. SHT 1 PL ADDED D3591-1 BUSHING, ZN C6 $\varnothing 0.438$ DIM WAS 4 PL. ADDED $\varnothing 0.499$ DIM AND D3591-1 BUSHING. SHT 2 PL ADDED D3591-1 BUSHING, ZN C6 $\varnothing 0.438$ DIM WAS 4 PL. ADDED $\varnothing 0.499$ DIM AND D3591-1 BUSHING. (FOR FURTHER INFO SEE DSI 9364 & NCR 08-074)	AJS	08.08.20
G	REPLACE NAS INSERTS W/ AELS INSERTS SWITCH TO D3670-XXXX SPACERS FOR INSTALLING FLOAT BAGS, DWG REORGANIZED FOR CLARITY	DC	07.07.31
F	ADD SS WEARSHOE, GASKET REMOVE FWD SADDLE HOLE -011/-021	PH	07.01.18
E	CHANGE TOLERANCE, EASE MANUFACTURE	PH	06.04.25
D	UPDATE TOLERANCE, CHANGE HOLE SIZE	PH	06.01.23
C	LENGTHEN AFT EXTENSION	PH	05.09.27
B	DRAWING UPDATES	PH	05.06.10
A	NEW ISSUE	PH	05.02.07
REV.	DESCRIPTION	BY	DATE
DESIGN	PH		
DRAWN	XDF		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	11.10.13		

DART AEROSPACE USA, INC  
KENT, WA

DRAWING NO. D3391  
REV. I  
SHEET 1 OF 8

TITLE 412 FLOAT SKIDTUBE  
SCALE NTS

COPYRIGHT © 2005 BY DART AEROSPACE USA, INC  
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

SEAL WITH SIKAFLEX-241/-291 PRIOR TO INSTALLATION OF WEARSHOES

D3391-021 FWD TUBE ASSEMBLY

TRANSFER DRILL THRU D3391-021 OPEN TO  $\begin{smallmatrix} +0.005 \\ \text{Ø0.438-0.000} \end{smallmatrix}$

D3391-023 MID TUBE ASSEMBLY

TRANSFER DRILL THRU D3391-021 OPEN TO Ø0.499 AND INSTALL D3591-1 BUSHING

SEAL WITH SIKAFLEX-241/-291 PRIOR TO INSTALLATION OF WEARSHOES

D3391-025 AFT TUBE ASSEMBLY

1 D4095-051 WEARSHOE REF

AN3C4A BOLT AN960C10L WASHER 4 PL

Ø0.50 4 PL 6

D4095-041 WEARSHOE 1

D4095-045 WEARSHOE 1

AN3C4A BOLT AN960C10L WASHER 20 PL

AN3C6A BOLT AN960C10L WASHER 6 PL

AN3C7A BOLT AN960C10L WASHER 4 PL

Ø0.50 4 PL 7

D4095-043 WEARSHOE 1

AN3C6A BOLT AN960C10L WASHER 4 PL

D4095-049 WEARPAD REF 1

### D3391-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

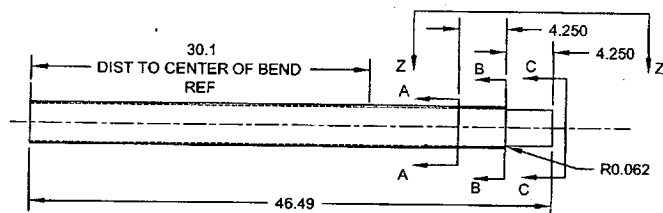
QTY	PART NUMBER	DESCRIPTION
X	D3391-043	FLOAT SKIDTUBE ASSEMBLY
1	D3391-021	RWD TUBE ASSEMBLY
1	D3391-023	MID TUBE ASSEMBLY
1	D3391-025	AFT TUBE ASSEMBLY
2	D3591-1	BUSHING
1	D4095-041	WEARSHOE
1	D4095-043	WEARSHOE
1	D4095-045	WEARSHOE
1	D4095-047	WEARPAD
1	D4095-049	WEARPAD
1	D4095-051	WEARSHOE
24	AN3C4A	BOLT
10	AN3C6A	BOLT
4	AN3C7A	BOLT
38	AN960C10L	WASHER

## GENERAL NOTES

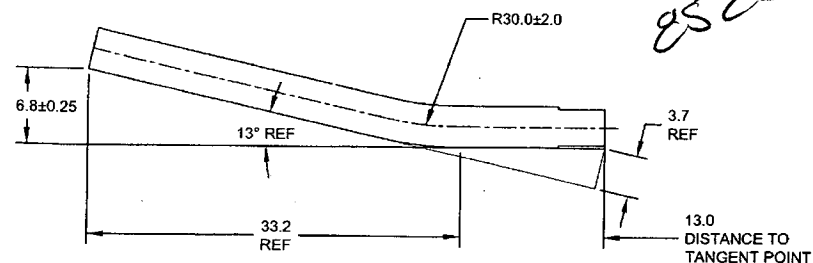
- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCRYON"  
AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø.297 SIZE HOLES  
FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT  
WHERE INDICATED.
- 6) FIT D4095-041 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH  
APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND  
TRANSFER DRILL Ø.50 HOLES FROM SADDLE TO D4095-041
- 7) FIT D4095-043 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH  
THE APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND  
TRANSFER DRILL Ø.50 HOLES FROM SADDLE TO D4095-043

RELEASE  
2011-11-04

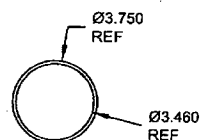
DESIGN	PH	<b>DART AEROSPACE USA, INC</b>	
DRAWN	XDF	KENT, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV.
MFG. APPR.	<i>[Signature]</i>	D3391	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	412 FLOAT SKIDTUBE	NT
DATE	11.10.13	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC THIS DOCUMENT IS UNCLASSIFIED AND ALL RIGHTS ARE RESERVED. IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



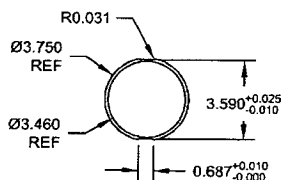
**D3391-1 CUTTING DETAIL**  
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



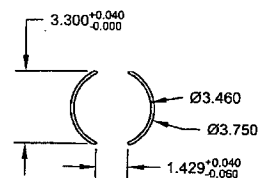
**D3391-011/-021 BENDING DETAIL**  
(MAKE FROM D3391-1)



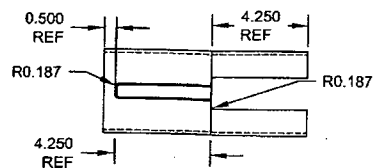
**SECTION A-A**  
SCALE 2X



**SECTION B-B**  
SCALE 2X



**SECTION C-C**  
SCALE 2X

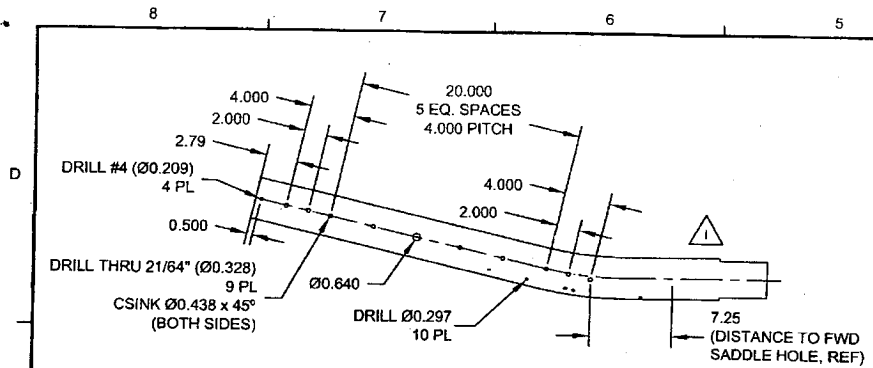


**VIEW Z-Z**  
SCALE 2X

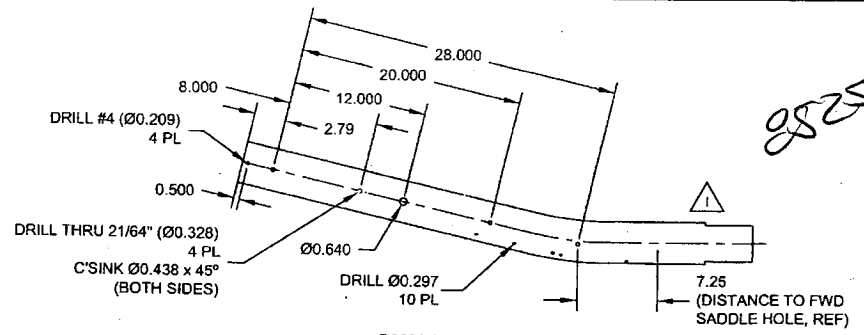
RELEASED  
2011-11-04

DESIGN	PH	<b>DART AEROSPACE USA, INC</b>	
DRAWN	XDF	KENT, WA	
CHECKED		DRAWING NO. D3391	REV. 1
MFG. APPR.		SHEET 3 OF 8	
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	11.10.13	<small>COPYRIGHT © 2005 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

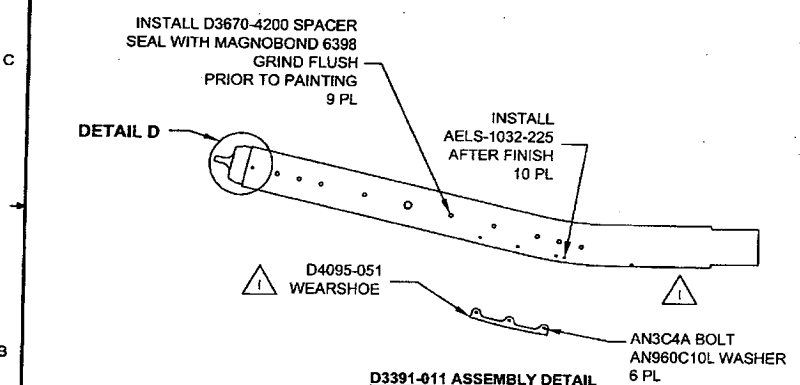
05252



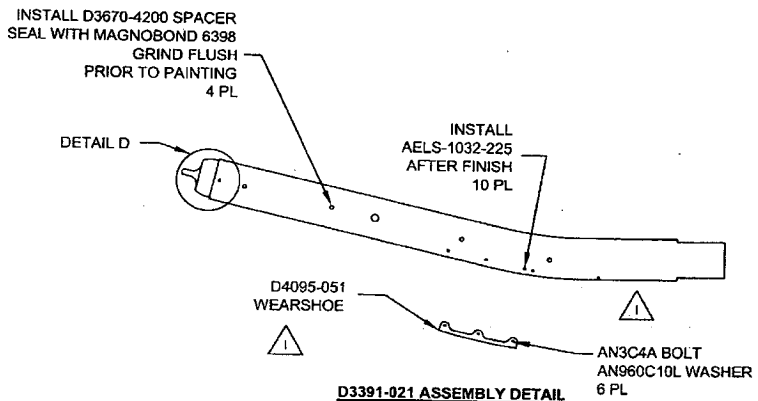
**D3391-011 DRILLING DETAIL**



**D3391-021 DRILLING DETAIL**



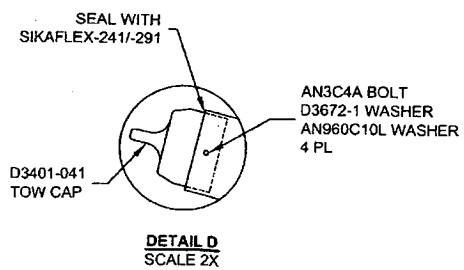
**D3391-011 ASSEMBLY DETAIL**



**D3391-021 ASSEMBLY DETAIL**

**D3391-011/-021 FWD TUBE ASSEMBLY PARTS LIST**

QTY - 011	QTY - 021	PART NUMBER	DESCRIPTION
X	X	D3391-011	FWD TUBE ASSEMBLY
		D3391-021	FWD TUBE ASSEMBLY
1	1	D3401-041	TOW CAP
9	4	D3670-4200	SPACER
4	4	D3672-1	WASHER
1	1	D4095-051	WEARSHOE
1	1	D6013-047	FWD TUBE
10	10	AN3C4A	BOLT
10	10	AN960C10L	WASHER
10	10	AELS-1032-225	INSERT

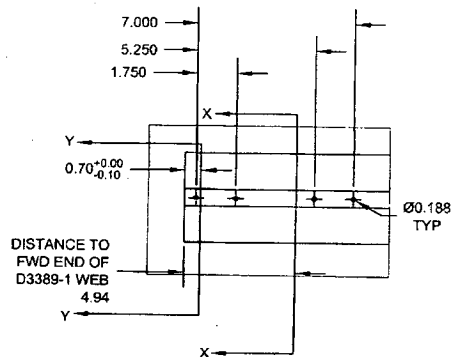


**DETAIL D  
SCALE 2X**

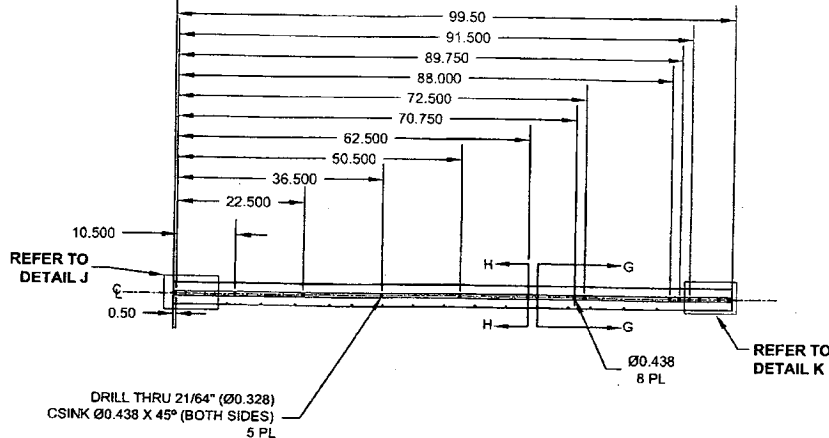
RELEASED  
2011-11-04

DESIGN	PH	<b>DART AEROSPACE USA, INC</b>	
DRAWN	XDF	KENT, WA	
CHECKED		DRAWING NO.	REV. I
MFG. APPR.		D3391	SHEET 4 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	11.10.13	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. IT IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

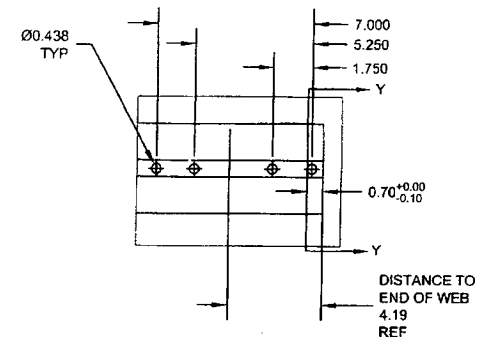




**DETAIL J**  
SCALE 4X



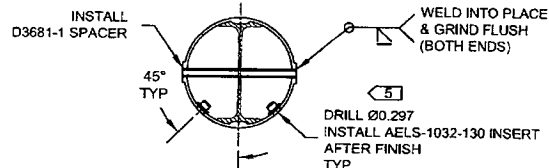
**D3391-023 ASSEMBLY DETAIL**



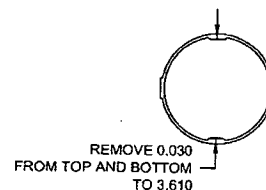
**DETAIL K**  
SCALE 4X



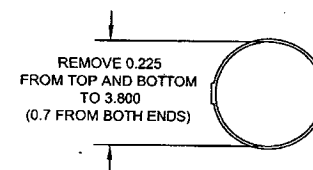
**SECTION G-G**  
SCALE 5X



**SECTION H-H**  
SCALE 5X



**SECTION X-X**  
SCALE 5X



**SECTION Y-Y**  
SCALE 5X

**D3391-023 MID TUBE ASSEMBLY PARTS LIST**

QTY - 023	PART NUMBER	DESCRIPTION
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

**D3391-023 MID TUBE ASSEMBLY**

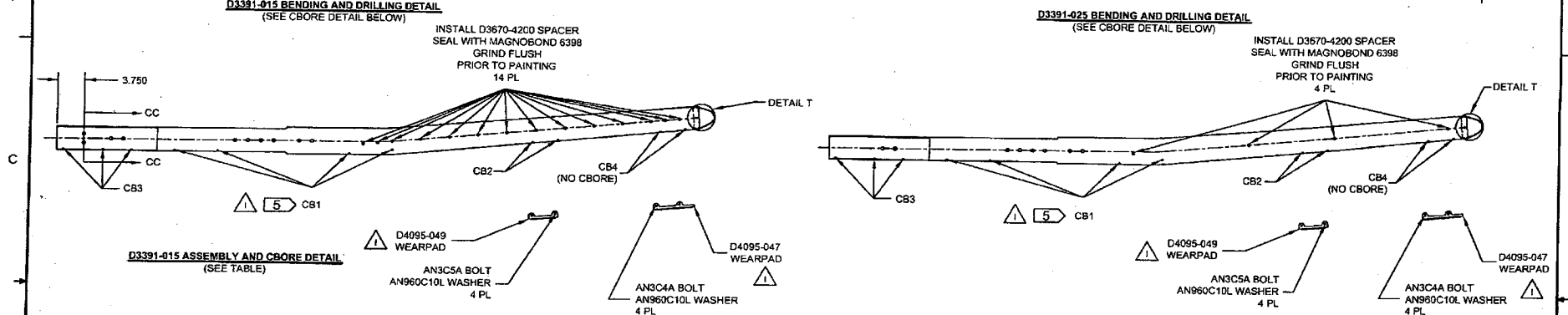
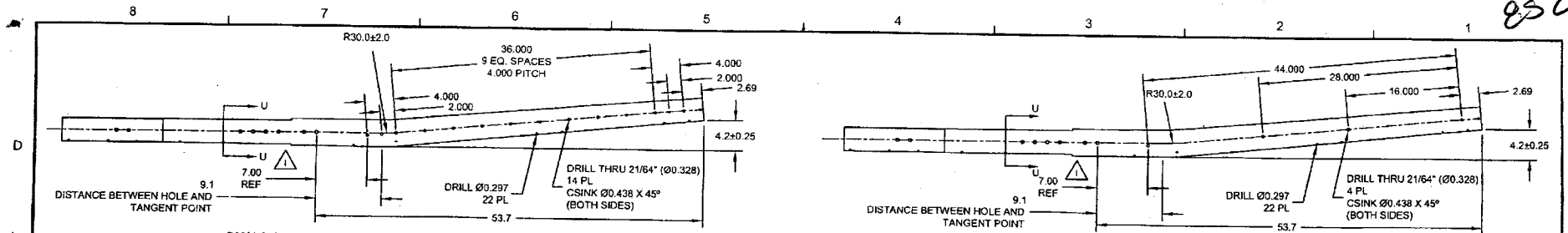
- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER QSI 015
- 3) WELDING: PER DART QSI 004

DESIGN	PH	<b>DART AEROSPACE USA, INC</b>	
DRAWN	XDF	KENT, WA	
CHECKED		DRAWING NO.	REV. I
MFG. APPR.		D3391	SHEET 6 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	11.10.13	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

RELEASED  
2011-11-04

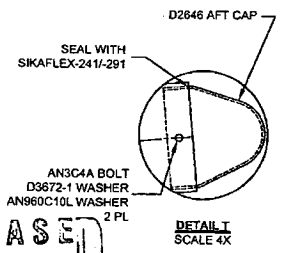
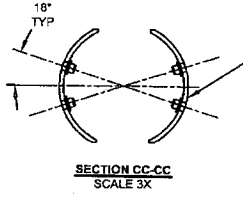
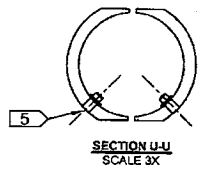
05252

85252



**D3391-015/-025 AFT TUBE ASSEMBLY PARTS LIST**

QTY - 015	QTY - 025	PART NUMBER	DESCRIPTION
X	X	D3391-015	AFT TUBE ASSEMBLY
		D3391-025	AFT TUBE ASSEMBLY
1	1	D2646	AFT CAP
14	4	D3670-4200	SPACER
2	2	D3672-1	WASHER
1	1	D4095-049	WEARPAD
1	1	D4095-047	WEARPAD
1	1	D6014-090	AFT TUBE
14	14	AELS-1032-130	INSERT
8	8	AELS-1032-225	INSERT
4	4	ALS4-428-165	INSERT
6	6	AN3C4A	BOLT
4	4	AN3C5A	BOLT
10	10	AN960C10L	WASHER



CBORE HOLES MARKED CB1-CB4 AS FOLLOWS AND INSTALL AELS-1032-XXX AFTER FINISH AS NOTED

HOLES MARKED	QTY D3391-015	QTY D3391-025	CBORE	P/N
CB1	8	8	Ø0.430 X 0.170	AELS-1032-225
CB2	4	4	Ø0.430 X 0.170	AELS-1032-130
CB3	6	6	Ø0.430 X 0.040	AELS-1032-130
CB4	4	4	NONE	AELS-1032-130

DESIGN	PH	<b>DART AEROSPACE USA, INC</b>	
DRAWN	XDF	KENT, WA	
CHECKED		DRAWING NO.	REV. 1
MFG. APPR.		D3391	SHEET 8 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	11.10.13	<small>COPYRIGHT © 2005 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. NO DISSEMINATION OR REPRODUCTION OF ANY PART OF THIS DOCUMENT IS PERMITTED WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	